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## Anti-takeover provisions and executive excess compensation: evidence from China

Zhiying Hu, Menglu Tong and Shangkun Liang

School of Economics and Management, University of Science and Technology Beijing, Beijing, People's Republic of China;; School of Accountancy, Central University of Finance and Economics, Beijing, People's Republic of China

### ABSTRACT

This article examines the effect of anti-takeover provisions on executive excess compensation and find a positive association. Five further findings are as follows. First, among specific provisions, the anti-takeover provisions mainly used to delay the takeover process have a stronger effect on executive excess compensation. Second, the positive effect of anti-takeover provisions on excess compensation is more significant in firms with higher executive power, less independent boards, and higher managerial myopia. Third, anti-takeover provisions have less effect on executive excess compensation in state-owned enterprises compared with non-state-owned enterprises. Fourth, the impact of the ownership structure on the anti-takeover provisions and excess compensation is non-linear. Fifth, the anti-takeover provisions decrease firm value, especially in those firms with more executive excess compensation. This article complements the literature on the anti-takeover provisions and executive compensation, which has great significance for the improvement of corporate governance.

### KEYWORDS

Anti-takeover provision; executive excess compensation; ownership concentration; property rights; firm value

## 1. Introduction

Executive compensation of Chinese listed companies has been increasing in recent years, which has attracted attention from not only practice but also scholars, especially after the implementation of the 'Salary Limit Order' in 2009. By enabling executives to focus on the long-term development of the firm and maximise the value of shareholders, the executive compensation scheme was originally used to alleviate the agency problem between the shareholders and the executives. However, the incompleteness of the compensation contract offers opportunities for executives to manipulate the design of contracts to seek personal benefits. Therefore, high compensation is actually the result of the executives' pursuit of personal interests and excess compensation will not only damage the interests of investors but also lead to unfairness of income distribution. Much of the literature documents that the quality of corporate governance is one of the most important factors that affect excess compensation.

**CONTACT** Zhiying Hu  [huzhy@manage.ustb.edu.cn](mailto:huzhy@manage.ustb.edu.cn)  School of Economics and Management, University of Science and Technology Beijing, Beijing, 100083, People's Republic of China

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The ‘share-splitting reform’ in 2007 activated hostile takeovers in China, which gradually formed the real corporate control market.<sup>1</sup> The ‘Control Contest between Baoneng and Vanke’ in 2015 made Chinese listed firms deeply aware of the threat coming from the control market. In order to resist a hostile takeover, many firms added anti-takeover provisions in their Corporate Charters. For the last 30 years, scholars have formed different views on the governance effects of the control market and how anti-takeover provisions affect executive behaviour. The ‘Executive Entrenchment Hypothesis’ argues that the establishment of anti-takeover provisions weakens the corporate governance effect of the external control market and aggravates the self-interest of executives, thereby damaging the firm value, while the ‘Long-term Benefit Hypothesis’ believes that anti-takeover provisions reduce the threat of hostile takeover, alleviating the executive myopia and is good for improving firm value. Nevertheless, both views agree that the anti-takeover provision is an important part of corporate governance.

Theoretically, if anti-takeover provisions reduce the executives’ disciplining from the control market, then executive entrenchment in firms with higher provisions intensity will be more serious, and excess compensation will be higher. On the contrary, if the anti-takeover provision relieves the market pressure of control market, the managerial myopia can be mitigated and the agency conflict between shareholders and executives will be alleviated, and then excess compensation can be reduced. So far, the literature on this topic has been relatively scarce, especially with China’s current background. Therefore, in China, will the adoption of anti-takeover provisions have an impact on executive excess compensation? How do the anti-takeover provisions affect executive excess compensation? What circumstances affect the relationship between the two? Could the impact of anti-takeover provisions have a value effect on excess compensation? As yet, there is no systematic study on these questions.

In order to answer the above questions, we use the A-share listed firms from 2009 to 2017 as a research sample, and manually collect data on anti-takeover provisions from Corporate Charter. We find a positive relationship between anti-takeover provisions and executive excess compensation. This result implies that the adoption of the anti-takeover provisions is a protection for the executive to seek personal interests, which can help them obtain excess compensation. Further study shows that, among the anti-takeover provisions, a special obligation to decrease the threshold of changes in shareholdings qualified for an announcement, and checking on board qualifications, restrictions on board nomination rights in terms of the duration of shareholdings and staggered boards, significantly increase excess compensation. At the same time, the provisions to delay an anti-takeover process have a stronger effect on executive excess compensation. In firms with higher executive power, less independent board, and higher managerial myopia, anti-takeover provisions have a more notable effect. Compared with non-state-owned firms, the effect of anti-takeover provisions on excess

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<sup>1</sup>The corporate control market is a market in which different executive teams compete for the right to manage the firm’s resources (Jensen & Ruback, 1983). Generally speaking, the corporate control market is composed of internal and external markets. In this article, however, we focus only on the external control market. Although proxy voting rights, friendly mergers and hostile takeover all are forms of the external corporate control market, the hostile takeover is the most effective way to discipline the firm’s executive. This is because the executive has to maintain stock prices through hard work in order to avoid the potential threat from a hostile takeover, which will directly cause forced executive turnover (W. A. Li et al., 2017). Whether the acquisition is hostile or not is judged based on the perception of the degree of negotiation between the acquirer and the target (Li, 2017). Therefore, we define market of control in this paper as a market formed by a hostile takeover. The anti-takeover provisions are referred to as a defence to hostile takeover.

compensation is less significant in state-owned enterprises because, in state-owned firms, the executive compensation is impacted more by the 'Salary Limit Order' and the control right is protected more by the government. Additionally, the impact of ownership structure on anti-takeover provisions and excess compensation is non-linear. In firms with lower shareholding by the largest shareholder, the positive impact of anti-takeover provisions on executive excess compensation rises with the decline in control, while, in firms with higher shareholding by the largest shareholder, control right has no significant influence on the relationship between anti-takeover provisions and executive excess compensation. Finally, the increase of anti-takeover provisions reduces firm value, especially in firms with higher excess compensation.

This study contributes to the existing literature in several ways. First, this study complements the law and finance literature by providing evidence on the influence of anti-takeover provisions on executive excess compensation under current background in China. Borokhovich et al. (1997) studies the impact of anti-takeover provisions on executive compensation using American data. To the best of our knowledge, we are the first to explore the impact of anti-takeover provisions on executive's excess compensation under the China's unique situation. Unlike firms in the United States, the ownership structure of listed firms in China is relatively concentrated, which forms a natural defence to hostile takeover and weakens the role of the control market in disciplining executives; meanwhile, driven by the gradual activation of hostile takeovers and 'Mixed Ownership Reform', ownership concentration in some firms tends to be more dispersed, which makes the control market's impact more noticeable. Thus, the anti-takeover provisions' impact on excess compensation would be binary and dependent on ownership concentration. In addition, the property right of state-owned enterprises is protected by the government, which leads to a less significant disciplining effect of the corporate control market on executives, and implies a different effect of the anti-takeover provisions on excess compensation due to different property rights. Consistent with the above arguments, we find that in firms with more dispersed ownership, the positive impact of anti-takeover provisions on excess compensation enlarges with the increase in equity dispersion, and the impact of anti-takeover provisions on excess compensation is more significant in non-state-owned enterprises. In addition, due to the different legal systems in China, the individual anti-takeover provisions adopted by listed firms in China also differ from those in the United States. Compared with the commonly used 24 provisions in the United States (Gompers et al., 2003), the provisions used in China are much more limited. For example, such provisions as fair price written into the 'Securities Law of the People's Republic of China' in 2006 no longer fall within the scope of charter autonomy, and the 'poison pill', which is regarded as the most powerful anti-takeover provision, is prohibited due to the limitation on the granting of preferred stock under China's legal system. Thus, the most commonly-used anti-takeover provisions in China are limited to those provisions related to limits on board election, such as staggered boards, checking on board qualification, restrictions on board nomination rights in terms of the threshold or the duration of shareholdings. Additionally, due to the 'Guidelines for Corporate Charter of Listed Firms' issued in 2002, cumulative voting rights and supermajority requirements are also widely implemented in China. Therefore, this article examines the influence of not only provisions intensity, but also individual provisions on executive excess compensation in the Chinese market, so as to provide evidence in the emerging transitional market to supplement the literature on the economic consequence of anti-takeover provisions.

Second, this paper also contributes to executive compensation research. Executive excess compensation has been a hot research topic in executive incentives in recent years. X. S. Chen and Liu (2019), Luo et al. (2018b), Xu and Zhang (2018), Cai et al. (2018), Quan et al. (2010), and X. Z. Zhang and Liu (2019) explore the factors impacting executive excess compensation from the perspective of formal or informal corporate governance mechanisms, such as property rights, board independence, executive power, media, and political connections. Distinct from those studies, this article explores the effect of anti-takeover provisions in the Corporate Charter. Prior researches document that property right plays an important part in the determination of executive compensation in China. For example, the evaluation of the executive in state-owned enterprise is based not only on financial performance but also on social responsibility performance. To the opposite, financial performance is most important in the determination of executive compensation in non-state-owned enterprises. Moreover, executive compensation in central-government-owned enterprise has been limited by the 'Salary Limit Order' issued in 2009, while executive compensation in private firms is more market-oriented. Based on our main findings, we further take property rights into account to study the impact of anti-takeover provisions on executive excess compensation, which also contributes to the executive incentives literatures to reach a better understanding of executive compensation systems under the background of China's system.

The remainder of this article proceeds as follows. Section 2 provides a literature review and develops the hypotheses. Section 3 presents the research design and the sample. Section 4 reports the results of the empirical analysis and corresponding robustness tests. Section 5 provides additional tests. Section 6 concludes.

## 2. Literature review and hypotheses development

### 2.1. *The economic consequence of anti-takeover provisions*

The anti-takeover provisions in the Corporate Charter are widely used by a firm to deter a hostile takeover. By increasing the cost of acquiring a target firm, the threat of control market is weakened. So far, scholars have formed two major but different views on the economic consequences of the anti-takeover provisions, namely, the 'Executive Entrenchment Hypothesis' and the 'Long-term Benefit Hypothesis'. The 'Executive Entrenchment Hypothesis' holds that the effective corporate control market restricts the self-interest behaviour of the executives, while the anti-takeover provisions reduce the threat of control brought by the market. As a result, the position of the executives is stabilised (Y. G. Chen & Shi, 2014), and the executives' entrenchment opportunity is increased, thereby the firm value is damaged. Based on this theory, scholars explore different paths for anti-takeover provisions to reduce firm value, such as reducing innovation (Atanassov, 2013), exacerbating executive's inertia and reducing work efficiency (Giroud & Mueller, 2011), investing in risk-averse projects (Gormley & Matsa, 2016), raising the compensation of executives and employees (Borokhovich et al., 1997), and protecting the ineffective executives (Y. G. Chen & Shi, 2014), thus damaging the interests of shareholders (Shao et al., 2013) and increasing agency costs (Chen et al., 2018; Gormley & Matsa, 2016; Shao et al., 2013), finally resulting in a decline in firm value (Cohen & Wang, 2013; Gompers et al., 2003).

Second, the ‘Long-term Benefit Hypothesis’ holds the view that the market of control exerts substantial pressure on the managers, which makes managers pursue short-term performance in order to avoid being the target of a hostile takeover. Correspondingly, anti-takeover provisions ease the pressure through the deterrence of the takeover market, thus mitigating managerial myopia, which is conducive to the firm’s long-term development and value enhancement. There are a number of research findings consistent with this view. For example, the evidence shows that anti-takeover provisions can enhance the bargaining power in M&A negotiation processes (Cain et al., 2017; Ertugrul & Mine, 2015), and they also can stabilise control rights (M. L. Xu et al., 2018), develop a better supply chain relationship (Cen et al., 2016), and enable managers to pursue long-term goals with greater long-term performance commitment (Bhojraj et al., 2017). In the meantime, they can also reduce the tunnelling of large shareholders (Li et al., 2016b; J. H. Xu et al., 2018), protect small and medium-sized investors and reduce agency costs (Zheng et al., 2011), so as to help firms produce better performance and improve their long-term value (Bhojraj et al., 2017; Chemmanur et al., 2011; Luo et al., 2018a).

## **2.2. Executive excess compensation**

Excess compensation is the result of executive self-interest. According to Bebchuk and Fried (2003), although executive compensation is designed to alleviate the agency problem caused by the separation of ownership and control, it also becomes a part of the agency problem. The excess compensation is a manifestation of executives’ power (Lu & Li, 2014), which aggravates agency conflicts (Wu & Wu, 2010) and reduces firm value (Morse et al., 2011). Specifically, the executives can use their power to obtain excess compensation through obtaining government subsidies (Luo, 2015), capturing the board (Brick et al., 2006; Zheng et al., 2012), controlling the design of their own compensation plan (Bebchuk & Fried, 2003; Wang et al., 2012), manipulating earnings (Quan et al., 2010) and so on. These agency problems of excess compensation are more obvious in firms with poor corporate governance (Core et al., 1999). Moreover, some studies also find that in order to justify their high compensation, executives would choose to disclose more information (Cheng et al., 2015), improve the compensation-performance sensitivity (Dai et al., 2011; H. Luo et al., 2014), and reduce debt financing (Huang et al., 2017), but the firms would not necessarily be better off (Faulkender & Yang, 2010). Additionally, in order to explore the mechanism of excess compensation, some studies investigate the factors that influence higher excess compensation. The results show that institutional investors (X. S. Chen & Liu, 2019), the board (Luo et al., 2018b; Zhao et al., 2017), political motivation (Xu & Zhang, 2018), property rights (Cai et al., 2018), executive power (Quan et al., 2010), executives’ personal characteristics (Shao & Fan, 2019), pyramid ownership structure (X. Z. Zhang & Liu, 2019), media (Yang & Zhao, 2012) and other corporate governance affect the excess compensation.

## **2.3. Anti-takeover provisions and executive excess compensation**

In sum, with regard to anti-takeover provisions, the research results of the existing literature mainly focus on the discussion of economic consequences, and form two different theories, that is ‘Executive Entrenchment Hypothesis’ and ‘Long-term Benefit Hypothesis’. For excess

compensation, existing studies generally regard it as the result of executive self-interest, and try to investigate its mechanism. Although anti-takeover provisions and executive excess compensation are inextricably linked as important corporate governance mechanisms, there are few literatures that combine these two together.

As mentioned above, the anti-acquisition provisions are adopted to resist the pressure of a takeover market by enhancing the difficulty of mounting a hostile acquisition. According to different understandings of the role of a takeover market, anti-takeover provisions will have two contrary impacts on the executive excess compensation. On the one hand, under the hypothesis of executive entrenchment, anti-takeover provisions will weaken corporate governance, intensify agency conflicts between executive and shareholders, and ultimately improve executive excess compensation. The market of control is an important external governance mechanism to discipline an inefficient executive and reduce agency costs. However, to mitigate takeover threats, firms are allowed to adopt anti-takeover provisions that protect incumbent executives by increasing the cost of hostile acquisition. Consequently, the adoption of anti-takeover provisions further increases the executive's ability to make self-interested decisions at the expense of shareholders' interests, ultimately intensifying the executive entrenchment behaviour. Based on that, obtaining excess compensation above expectation is a direct means commonly used by executives to expropriate shareholders. Therefore, executives in firms with more takeover protection are more likely to design an excess compensation scheme to fulfil their self-interest.

On the other hand, under the hypothesis of long-term benefit, the adoption of anti-takeover provisions may mitigate executives' myopia, reduce agency conflicts, and weaken the executives' motivation for expropriation behaviour, and finally inhibiting the executive excess compensation. Previous literature documents that under the pressure of a takeover market, executives engage in more opportunistic behaviours to maintain good short-term performance, which maximises their private benefits, and further aggravates the type I agency conflict. However, anti-takeover provisions mitigate the threat of a takeover market, thus easing managers from the concern that they would be replaced before the value of the long-term project is realised. In this sense, they would be more dedicated to long-term development, the alignment of interests between executives and shareholders will be enhanced, and the motivation of executives to obtain private benefits through excessive compensation will be reduced. Moreover, considering executives' implicit compensation, anti-takeover provisions reduce the contracting costs of risk-averse executives, making it easier for them to accept compensation plans that defer their remuneration to a later stage, and ultimately obtain lower current excess compensation.

The takeover market in China was activated after the 'share-splitting reform', and it became increasingly active after the 'Control Contest between Baoneng and Vanke'. Similar to the US, the market of control has brought pressures of hostile takeovers, thereby adding to executives' career concerns (Lu, 2010). For example, Baoneng 'brutally invaded' CSG A, and then 'bloodbathed' the firm's original executive team, including its founders, at the end of 2016. As a response, some firms adopted anti-takeover provisions, which played an important role in deterring the pressure of a hostile takeover. The 'Control Contest between Baoneng and Vanke' is a classic case in this area. Faced with a strong invasion of 'barbarians', during the process of the struggle for control rights,



Vanke's executive team took appropriate anti-takeover measures and finally won the battle. It cannot be denied that anti-takeover provisions which are adopted in the Corporate Charter beforehand play an important role, including restrictions on board nomination rights in terms of the threshold or the duration of shareholdings, cumulative voting rights and supermajority requirements. Moreover, the results of the empirical studies by Y. G. Chen and Shi (2014) and Li et al. (2016a) also evidence the effect of anti-takeover provisions on deterring takeover. Thus, it can reasonably be inferred that the adoption of anti-takeover provisions can affect executive excess compensation by reducing the market pressure of takeover market in China, but there may still coexist two contrary effects. That is, on the one hand, anti-takeover provisions may raise excess compensation, showing the executive entrenchment effect. Some anecdotes can help us understand this argument. In our sample period, Bao'an (000009) changed its anti-takeover provisions twice, in 2014 and 2016. In 2014, with the adoption of staggered board provision, the executive excess compensation increased from 0.4550 in 2013 year to 0.9770 in 2014. In 2016, with the golden parachute provision further added to the charter, the executive excess compensation further increased to 1.3138. On the other hand, the adoption of anti-takeover provisions may reduce excess compensation and show long-term benefits. There is another example: Annada (002136) added the checking on board qualification provision in 2016 and added restrictions on board nomination rights in terms of the threshold of shareholdings provision in 2017, while the excess compensation of executives in the two years fell from 0.04141 in 2015 to -0.2225 in 2016, then further dropped to -0.3710 in 2017. The above two firms differ greatly in corporate characteristics, such as the largest shareholder's shareholding, executive power, board supervision, and R&D investment intensity.

Based on above analysis, the impact of anti-takeover provisions on executive excess compensation is an empirical question in China. Considering that it is hard to determine the direction of the influence, we propose a null hypothesis, that is:

$H_0$ : Ceteris paribus, the adoption of anti-takeover provisions in the Corporate Charter will not affect the executive excess compensation.

### 3. Research design and sample selection

#### 3.1. Research design

To test our research hypothesis, we estimate the following regression model (1).

$$Overpay = a_0 + a_1 \Delta ATP + \Sigma control + \varepsilon \quad (1)$$

In model (1), the dependent variable is executive excess compensation (*Overpay*). We use the difference between actual executive compensation and expected executive compensation as the measure of executive excess compensation. To obtain this proxy, we firstly calculate the expected top three executives' excess compensation following Fang (2012) and Core et al. (2008), and then use model (2) to calculate *Overpay*.



$$\text{Overpay} = \text{Ln}(\text{actual compensation}_{\text{topthreeexecutives}}) - \text{Ln}(\text{expected compensation}_{\text{topthreeexecutives}}) \quad (2)$$

The sum of anti-takeover provisions (ATP) measuring the strength of a firm's anti-takeover, our main interesting variable, is commonly used in the literature to proxy for the adoption of anti-takeover provisions.<sup>2</sup> Following Gompers et al. (2003), Y. G. Chen and Shi (2014) and Luo et al. (2018a), we summarise the nine anti-takeover provisions in the Corporate Charter of Chinese listed firms, that is, golden parachute, checking on board qualification, staggered boards, provision to increase either the threshold or the duration of shareholdings qualified to propose an interim shareholders' meeting, restrictions on board nomination rights in terms of the threshold or the duration of shareholdings, special obligation to decrease the threshold of changes in shareholdings qualified for an announcement, cumulative voting rights and supermajority requirement. Specifically, we use the following criteria to determine the specific anti-takeover provision: (1) if a clause of the Corporate Charter specifies that the top managers receive additional compensation when the firm's control is transferred, the 'golden parachute' is determined. (2) When a shareholder holds shares to a certain threshold less than 5% or the increase or decrease of shareholding is less than 5%, the plan of shareholding needs to be reported, and then 'special obligation to decrease the threshold of changes in shareholdings qualified for an announcement' is determined. (3) If a provision of the Corporate Charter requires a shareholder's shareholding duration to be greater than 'continuous 90 days' or the shareholding must exceed '10%' when a shareholder aims to call an interim shareholder meeting, it is considered to have a 'provision to increase either the threshold or the duration of shareholdings qualified to propose an interim shareholders' meeting'. (4) 'Supermajority requirement' is specified when a provision requires that a firm's special issues to be passed only if agreed by more than 2/3 of the voting rights of the shareholders and their proxies. (5) If the provision of the Corporate Charter stipulates that one shareholder is entitled to multiple votes, the number of which equals the number of positions being voting on when directors or supervisors are elected at the general meeting of shareholders, and a shareholder can choose to cast all his or her votes for one director, which increases the likelihood of a particular director being elected, 'cumulative voting right' is deemed to exist. (6) If a provision of the Corporate Charter requires that the shareholders who nominate directors or supervisor candidates should have continuous shareholding for above the minimum '90 days', then 'restrictions on board nomination rights in terms of the duration of shareholdings' is determined. (7) If a provision of the Corporate Charter requires the shareholders who nominate directors or supervisor candidates should have a shareholding threshold above '5%', then 'restrictions on board nomination rights in terms of the threshold of shareholdings' is determined. (8) If the Corporate Charter specifies that the board has the right to refuse to submit candidates and proposals that do not meet the requirements to the shareholders meeting for discussion, or to determine the final candidates, it is deemed to have a provision of 'checking on board qualification'. (9) If the Corporate Charter stipulates that all directors cannot be replaced in the same year, it shall be deemed to have 'staggered board' provision.

<sup>2</sup>In the previous studies, a dummy variable, that is whether to adopt anti-takeover provisions or not, is also commonly used. However, supermajority requirement is adopted by all firms in our sample, which constrains its use in our study.

In addition, following the prior literature, the control variables in this paper include firm size (*Size*), growth of the firm (*Growth*), firm performance (*ROA*), financial leverage (*Lev*), book-to-market value ratio (*MB*), property rights (*Soe*), the shareholding of largest shareholder (*Top1*), stock return (*Stockreturn*), stock volatility (*Volatility*), as well as region, industry and year dummy variables. All variable definitions are specified in [Table 1](#).

We are interested in the coefficient of the *ATP* variable in model (1). If the result shows that the *ATP*'s coefficient  $\alpha_1$  is significantly positive, it represents a positive correlation between *ATP* and *Overpay*. That is to say, a firm with stronger anti-takeover provisions has higher executive excess compensation, and the 'Executive Entrenchment Hypothesis' is supported. On the contrary, if the coefficient of *ATP* is negative, it means that the enhancement in anti-takeover intensity will reduce the executive excess compensation, and the 'Long-term Benefit Hypothesis' is supported. Thus, we can reject the null hypothesis.

### 3.2. Sample selection

Our sample consists of firms in China listed on the Shanghai Stock Exchange and the Shenzhen Stock Exchange from 2009 to 2017. We further exclude observations as follows: (1) 711 observations in the financial industry; (2) 623 observations with missing data on anti-takeover provisions in the Corporate Charter; (3) 9169 observations with missing financial and other data. Finally our sample comprises 12,266 firm-year observations. In order to eliminate the influence of extreme outliers, all continuous variables are winsorised at 1% and 99% percentiles. The sample selection process is reported in [Table 2](#) Panel A. The data on the anti-takeover provisions in this paper are manually collected from Corporate Charters, and the financial and other data used are taken from CSMAR and WIND databases.

The year distribution of the sample firms is reported in [Table 2](#) Panel B. The table demonstrates that the observation number increases year by year from 2009 to 2017, with 704 firm-year observations in 2009, accounting for 5.74% of the full sample, and 1785

**Table 1.** Variable definition and description.

Variable type	Variable name	Definitions
Dependent variable	<i>Overpay</i>	$\ln(\text{actual compensation}_{top\ three\ executives}) - \ln(\text{expected compensation}_{top\ three\ executives})$
Independent variable	<i>ATP</i>	The number of anti-takeover provisions in Corporate Charter
Control variables	<i>Size</i>	Natural logarithm of total assets
	<i>Growth</i>	The change of net income between two consecutive years/net income of $t-1$ period
	<i>ROA</i>	Net profit/Total assets
	<i>Lev</i>	Total liabilities/Total assets
	<i>MB</i>	Book-to-market ratio
	<i>Soe</i>	If actual controller is state-owned, it equals 1, and 0 otherwise
	<i>Top1</i>	Shareholding ratio of the largest shareholder
	<i>Stockreturn</i>	Annual stock return
	<i>Volatility</i>	Standard deviation of the stock annual monthly return
	<i>Area</i>	An indicator variable for region, including east, central, and west
	<i>Ind</i>	Dummy industry variable
	<i>Year</i>	Dummy year variable

**Table 2.** Sample selection and distribution.

Panel A: Sample selection process		
		Observations (firm-year)
Initial sample		22769
Excluding the samples missing corporate charter		623
Excluding the samples in financial industry		711
Excluding the samples missing main data		9169
Final sample		12266
Panel B: Year distribution		
Year	Observations	Percentage (%)
2009	704	5.74
2010	800	6.52
2011	1110	9.05
2012	1468	11.97
2013	1532	12.49
2014	1451	11.83
2015	1548	12.62
2016	1778	14.50
2017	1785	15.29
Total	12266	100

firm-year observations in 2017, accounting for 15.29% of the full sample, which is consistent with the development of the Chinese capital market.

Panel C reports the distribution of anti-takeover provisions intensity due to the extent of ownership concentration. The result shows that, with the increase of provisions intensity, the observation number firstly increases then decreases generally. Seventy-eight firms adopted just one provision across the sample period, which rises to 6,822 firms adopting two provisions – which forms the largest population of sample firms – and the number falls to 4,113 observations with three provisions. Finally, there is only one observation with eight provisions. Furthermore, when we divide the sample into two subsamples according to the sample median of the largest shareholding, we find that the firms with lower ownership concentration adopt more provisions. This means that firms with more dispersed ownership are eager to defend themselves by adopting stronger anti-takeover provisions to protect control.

Finally, panel D reports the distribution of anti-takeover provisions intensity due to the difference in property rights. From Panel D we could see that non-state-owned sample firms adopt more provisions. This shows that the nature of property rights in China has a special impact on the adoption of anti-takeover provisions. Since the control right in state-owned firms is protected by the government, the takeover market has less impact on these firms, and they have less motivation for anti-takeover provisions.

## 4. Empirical analysis

### 4.1. Descriptive statistics and correlation test

Panel A in Table 3 presents the descriptive statistics for all variables in the regressions. First of all, from the table, we find that during the year 2009 to 2017, the average of *Overpay* is 0.017 and median is 0.017, with the minimum of –1.346, maximum of 1.389 and the standard deviation of 0.551, meaning that excess compensation is common and there

**Table 3.** Descriptive statistics and correlation tests.

Panel A: Descriptive statistics										
Variable name	Obs	Mean	SD	Min	Median	Max				
Overpay	12266	0.017	0.551	-1.346	0.017	1.389				
ATP	12266	2.576	0.805	1.000	2.000	8.000				
Size	12266	21.896	1.090	19.769	21.776	24.984				
Growth	12266	0.180	0.291	-0.236	0.107	1.753				
ROA	12266	0.061	0.059	-0.137	0.055	0.253				
Lev	12266	0.414	0.210	0.051	0.402	0.906				
MB	12266	0.559	0.224	0.113	0.553	1.043				
Soe	12266	0.336	0.472	0.000	0.000	1.000				
Top1	12266	0.344	0.147	0.085	0.323	0.748				
Stockreturn	12266	0.076	0.585	-0.733	-0.077	2.310				
Volatility	12266	0.135	0.062	0.047	0.121	0.390				

  

Panel B: Correlation coefficient matrix											
	Overpay	ATP	Size	Growth	ROA	Lev	MB	Soe	Top1	Stockreturn	Volatility
Overpay	1										
ATP	0.036***	1									
Size	0.014	0.040***	1								
Growth	-0.038***	-0.028***	0.121***	1							
ROA	0.031***	-0.001	0.051***	0.238***	1						
Lev	-0.067***	0.045***	0.488***	0.023***	-0.251***	1					
MB	-0.101***	-0.010	0.503***	-0.032***	-0.194***	0.338***	1				
Soe	-0.009	0.067***	0.288***	-0.140***	-0.096***	0.311***	0.179***	1			
Top1	-0.061***	-0.060***	0.174***	0.053***	0.101***	0.042***	0.170***	0.179***	1		
Stockreturn	-0.006	0.029***	-0.049***	0.038***	0.015*	0.102***	-0.264***	0.085***	-0.003	1	
Volatility	-0.015	-0.027***	-0.145***	0.123***	-0.084***	-0.027***	-0.344***	-0.089***	-0.046***	0.378***	1

\*, \*\*, and \*\*\* mean significant at the level of 10%, 5% and 1% respectively, the same below

are some variations across firms. The anti-takeover provisions (*ATP*) vary from 1 to 8, with a mean of 2.576 and a median of 2, indicating the intensity of anti-takeover provisions in Chinese listed firms differs greatly. Second, the financial position of the sample firms is quite normal. The average value and standard deviation of firm size (*Size*) are 21.896 and 1.090, respectively. The average value of financial leverage (*Lev*) is 41.4%, and the mean of the sample's financial performance (*ROA*) is 6.1%. Third, the largest shareholder's shareholding (*Top1*) averages 34.4%, implying relatively high ownership concentration. In addition, 33.6% of the sample firms are state-owned enterprises. Finally, the firm's stock return (*Stockreturn*) has a large variance, with the highest percentage of 231% and the lowest of -7.70%. The stock return's volatility (*Volatility*) is high, with a standard deviation of 0.135, indicating the large differences in corporate risk.

Panel B of [Table 3](#) reports the correlation coefficient matrix of the main variables. The result shows that the absolute value of the correlation coefficients among other variables are all less than 0.4, except for the correlation coefficient between *Size* and *Lev* with 0.488, and *Size* and *MB* with 0.503, which indicates that our results would not be seriously affected by a multicollinearity problem among the variables. It can also be found that the coefficient of *Overpay* and *ATP* is positive, and significantly positive at the 1% level. This result means that the more anti-takeover provisions, the greater is the excess compensation of executives, which provides preliminary support for the executive entrenchment hypothesis, at the meanwhile rejects the null hypothesis.

## 4.2. Empirical results

The regression results are presented in [Table 4](#). Column (1) reports the result before adding control variables, column (2) reports the result after adding control variables except region, industry, and year dummy variables, and column (3) reports the result after adding all control variables. The results show that before controlling for any other variables, the coefficient of *ATP* is 0.025 and statistically significant at the 1% level. When the firm's financial and governance characteristics are controlled, the coefficient of *ATP* is 0.018, and the significance level remains at 1%. After further controlling for region, industry and year, the coefficient of *ATP* is 0.016, which is still positive at the significance level of 1%. Overall, the above research results provide strong support that the executives find it easier to obtain excess compensation with the intensifying of anti-takeover provisions of the Corporate Charter. Accordingly, the null hypothesis is rejected. In line with prior studies (Quan et al., 2010), the excess compensation tends to be higher with the increase of firm size, while the increase of growth rate, financial leverage and firm performance leads to a lower level of excess compensation.

## 4.3. Robustness test

### 4.3.1. Endogeneity issues

The above empirical results show that the executive excess compensation increases with the intensifying of anti-takeover provisions. However, the research results may be affected by endogenous issues. To make the research results more robust, we conduct two tests.

**Table 4.** Baseline regression results.

	(1) <i>Overpay</i>	(2) <i>Overpay</i>	(3) <i>Overpay</i>
<i>ATP</i>	0.025*** (3.98)	0.018*** (3.00)	0.016*** (2.66)
<i>Size</i>		0.072*** (11.92)	0.105*** (15.19)
<i>Growth</i>		-0.098*** (-5.47)	-0.078*** (-4.33)
<i>ROA</i>		-0.117 (-1.23)	-0.365*** (-3.71)
<i>Lev</i>		-0.220*** (-7.52)	-0.291*** (-9.51)
<i>MB</i>		-0.384*** (-13.38)	-0.566*** (-17.12)
<i>Soe</i>		0.001 (0.13)	-0.011 (-0.91)
<i>Top1</i>		-0.214*** (-6.15)	-0.236*** (-6.74)
<i>Stockreturn</i>		-0.015 (-1.54)	-0.045*** (-3.68)
<i>Volatility</i>		-0.360*** (-3.95)	-0.162 (-1.50)
<i>_cons</i>	-0.047*** (-2.81)	-1.149*** (-9.54)	-1.688*** (-12.00)
<i>Area</i>	No	No	Yes
<i>Ind</i>	No	No	Yes
<i>Year</i>	No	No	Yes
<i>N</i>	12266	12266	12266
<i>r2_a</i>	0.001	0.029	0.039
<i>F</i>	15.86	37.95	15.17

First, to address the endogeneity concern caused by omitted variables, following G. L. Liu (2017), we use the mean ATP at the industry level (*ATP\_IND*) and the province level (*ATP\_Province*) as instrument variables, and estimate a two-stage least square regression.<sup>3</sup> The mean ATP at the industry level or the city level would improve the observation's level of ATP due to peer effects or institutional isomorphism (DiMaggio & Powell, 1983), but would not be significantly correlated with the executive excess compensation. The second stage regression results are reported in Table 5. Column (1) reports the result before adding control variables, column (2) reports the result after adding all other control variables except region, industry, and year dummy variables, and column (3) reports the result after adding all control variables. The results show that the coefficients of *ATP* are 0.210, 0.226, and 0.038, respectively, and are all significant at the 1% level, which is consistent with our baseline results. Therefore, the main results are still robust after controlling for the endogenous problems of omitted variables.

Second, to control the potential endogeneity caused by sample self-selection and reverse causality, we use the PSM-DID method. We first determine the firms that changed anti-takeover provisions during the sample period, and define the dummy variables *UP* and *Treat*. If there is an increase in anti-takeover provisions, *UP* equals 1 in the current year, and 0 otherwise. Next, considering that the anti-takeover provisions' change can be observed just ex-post, which may be affected by latent variables, we use the propensity matching score (*PSM*) to match the control group with the treatment group (*UP* = 1). Following Bhojraj et al. (2017), we use lag one period cash and equivalents (*Cash*), asset-

<sup>3</sup>These two variables both pass weak instrumental variables tests.

**Table 5.** Instrumental variable test.

	(1) Overpay	(2) Overpay	(3) Overpay
<i>ATP</i>	0.210*** (4.87)	0.226*** (4.77)	0.038*** (2.78)
<i>Size</i>		0.065*** (9.99)	0.104*** (15.00)
<i>Growth</i>		-0.081*** (-4.22)	-0.077*** (-4.24)
<i>ROA</i>		-0.149 (-1.49)	-0.366*** (-3.72)
<i>Lev</i>		-0.237*** (-7.71)	-0.291*** (-9.53)
<i>MB</i>		-0.353*** (-11.44)	-0.562*** (-16.97)
<i>Soe</i>		-0.019 (-1.51)	-0.012 (-1.02)
<i>Top1</i>		-0.127*** (-3.06)	-0.227*** (-6.44)
<i>Stockreturn</i>		-0.023** (-2.26)	-0.046*** (-3.72)
<i>Volatility</i>		-0.256*** (-2.61)	-0.153 (-1.41)
<i>_cons</i>	-0.524*** (-4.71)	-1.580*** (-9.93)	-1.729*** (-12.14)
<i>Area</i>	No	No	Yes
<i>Ind</i>	No	No	Yes
<i>Year</i>	No	No	Yes
<i>N</i>	12266	12266	12266
<i>F</i>	23.69	36.15	15.17

liability ratio (*Lev*), the proportion of fixed assets (*PPE*), firm size (*Size*), return on assets (*ROA*), operating revenue growth rate (*Growth*), executive power (*PowerIndex*), the shareholding of the largest shareholder (*Top1*), state-owned enterprises (*Soe*), and industry M&A intensity (*MA*) as matching variables. Among them, *Cash* is measured as the proportion of cash, bank deposits, and trading financial assets to total assets; *PPE* is the proportion of fixed assets in total assets; *MA* is defined as the total number of mergers and acquisitions of listed firms in the same industry during the previous year. Borrowed from the research design of Finkelstein (1992), Quan and Wu (2010), we mainly select eight proxies to add the value of them together and calculate their mean to represent the executive power (*PowerIndex*), which are (1) structural power: duality (indicator variable, equals 1 if the chairman and CEO are the same person, and 0 otherwise); internal-director (dummy variable, equals 1 if the CEO is a member of the internal board of directors, and 0 otherwise). (2) Ownership power: shareholding (indicator variable, equals 1 if the CEO holds shares, and 0 otherwise); institutional investor shareholding ratio (indicator variable, equals 1 if institutional investor shareholding ratio is below median, and 0 otherwise). (3) Expert power: senior title (indicator variable, equals 1 if the CEO has a senior title, and 0 otherwise); CEO tenure (indicator variable, equals 1 if the CEO incumbent tenure is above median, and 0 otherwise). (4) Reputation power: senior education (indicator variable, equals 1 if the CEO gains a master's degree or above, and 0 otherwise); CEO part-time (indicator variable, equals 1 if the CEO holds a part-time position outside the firm, and 0 otherwise). The other variables are defined in Table 1. Furthermore, difference-in-difference (DID) is performed on the matched samples. The variable *Post* is further generated,



**Table 6.** PSM-DID test.

	(1) Overpay	(2) Overpay	(3) Overpay
<i>UP</i>	0.026 (1.38)	0.032* (1.71)	0.037* (1.93)
<i>UP_Post</i>	0.053* (1.74)	0.053* (1.76)	0.084*** (2.76)
<i>Post</i>	-0.041* (-1.82)	-0.082*** (-3.58)	-0.083*** (-3.12)
<i>Size</i>		0.071*** (7.53)	0.104*** (10.39)
<i>Growth</i>		-0.066** (-2.29)	-0.048* (-1.86)
<i>ROA</i>		-0.359** (-2.36)	-0.330** (-2.22)
<i>Lev</i>		-0.163*** (-3.57)	-0.194*** (-4.10)
<i>MB</i>		-0.504*** (-11.21)	-0.615*** (-12.17)
<i>Soe</i>		0.030* (1.83)	0.032* (1.74)
<i>Top1</i>		-0.110** (-2.07)	-0.433*** (-8.22)
<i>Stockreturn</i>		-0.036** (-2.53)	-0.065*** (-3.52)
<i>Volatility</i>		-0.439*** (-3.08)	-0.090 (-0.58)
<i>_cons</i>	0.022 (1.64)	-1.054*** (-5.73)	-1.703*** (-7.82)
<i>Area</i>	No	No	Yes
<i>Ind</i>	No	No	Yes
<i>Year</i>	No	No	Yes
<i>N</i>	5237	5237	5237
<i>r2_a</i>	0.002	0.031	0.061
<i>F</i>	4.40	15.58	10.15

that is, it takes 1 on the year the anti-takeover provisions increase and the years after, 0 otherwise. The model (1) is regressed by replacing *ATP* with *UP*, *Post*, and their interaction term *UP\_Post*. The regression results are shown in [Table 6](#).<sup>4</sup> Column (1) shows the result without any control variables, column (2) reports the result with control variables except the region, industry, and year dummy variables, and column (3) reports the result after adding all control variables. It can be seen from [Table 6](#) that, in any case, the executive excess compensation increases significantly with the increasing intensity of anti-takeover provisions. The coefficients of the interaction term *UP\_Post* are 0.053, 0.053, and 0.084, respectively, and all are statistically significant. Based on the above results, we consider that the baseline results of this study have not changed significantly after the control for sample self-selection and reverse causality endogeneity.

#### 4.3.2. Alternative variables

Following G. Y. Xu et al. (2018), considering that the excess compensation may be affected by the difference among the industries, we recalculate *Adj\_Overpay* by subtracting the industry median from the raw *Overpay* as an alternative dependent variable. And then replace *Overpay* in model (1) with *Adj\_Overpay* to repeat the main regression. Panel A of [Table 7](#) shows the regression results, where column (1) is the result before adding any

<sup>4</sup>The balance test result of first stage shows that there are no significant differences after matching.

**Table 7.** Robustness checks with alternative variables.

Panel A. Alternative dependent variable			
	(1) <i>Adj_Overpay</i>	(2) <i>Adj_Overpay</i>	<i>Adj_Overpay</i>
<i>ATP</i>	0.025*** (4.00)	0.019*** (3.01)	0.016*** (2.66)
<i>Size</i>		0.072*** (11.93)	0.105*** (15.18)
<i>Growth</i>		-0.098*** (-5.45)	-0.079*** (-4.34)
<i>ROA</i>		-0.124 (-1.30)	-0.369*** (-3.74)
<i>Lev</i>		-0.220*** (-7.52)	-0.292*** (-9.53)
<i>MB</i>		-0.385*** (-13.40)	-0.567*** (-17.10)
<i>Soe</i>		0.002 (0.17)	-0.011 (-0.93)
<i>Top1</i>		-0.212*** (-6.08)	-0.236*** (-6.72)
<i>Stockreturn</i>		-0.015 (-1.55)	-0.045*** (-3.69)
<i>Volatility</i>		-0.373*** (-4.08)	-0.163 (-1.50)
<i>_cons</i>	-0.054*** (-3.21)	-1.158*** (-9.60)	-1.674*** (-11.88)
<i>Area</i>	No	No	Yes
<i>Ind</i>	No	No	Yes
<i>Year</i>	No	No	Yes
<i>N</i>	12266	12266	12266
<i>r2_a</i>	0.001	0.029	0.039
<i>F</i>	15.97	37.88	15.25
Panel B Alternative independent variable			
	(1) <i>Overpay</i>	(2) <i>Overpay</i>	(3) <i>Overpay</i>
<i>ATP6</i>	0.015** (2.37)		
<i>ATP2</i>		0.083*** (4.09)	
<i>ATP3</i>			0.076*** (4.09)
<i>Size</i>	0.106*** (15.22)	0.105*** (15.09)	0.105*** (15.11)
<i>Growth</i>	-0.078*** (-4.34)	-0.078*** (-4.33)	-0.078*** (-4.30)
<i>ROA</i>	-0.366*** (-3.72)	-0.364*** (-3.71)	-0.366*** (-3.72)
<i>Lev</i>	-0.291*** (-9.51)	-0.290*** (-9.48)	-0.291*** (-9.51)
<i>MB</i>	-0.567*** (-17.13)	-0.565*** (-17.08)	-0.566*** (-17.10)
<i>Soe</i>	-0.011 (-0.91)	-0.010 (-0.80)	-0.010 (-0.85)
<i>Top1</i>	-0.237*** (-6.77)	-0.229*** (-6.51)	-0.229*** (-6.53)
<i>Stockreturn</i>	-0.045*** (-3.68)	-0.045*** (-3.68)	-0.045*** (-3.67)
<i>Volatility</i>	-0.163 (-1.51)	-0.160 (-1.48)	-0.160 (-1.48)
<i>_cons</i>	-1.687*** (-11.99)	-1.644*** (-11.73)	-1.720*** (-12.20)
<i>Area</i>	Yes	Yes	Yes
<i>Ind</i>	Yes	Yes	Yes
<i>Year</i>	Yes	Yes	Yes
<i>N</i>	12266	12266	12266

(Continued)

**Table 7.** (Continued).

Panel A. Alternative dependent variable			
	(1) <i>Adj_Overpay</i>	(2) <i>Adj_Overpay</i>	<i>Adj_Overpay</i>
<i>r2_a</i>	0.039	0.040	0.040
<i>F</i>	15.12	15.46	15.46

control variables, column (2) reports the result with control variables except region, industry, and year dummy variables, and column (3) reports the result with all control variables. It can be seen from the table that whether the control variables are added or not, the conclusion that the executive excess compensation significantly increases with the intensity of anti-takeover provisions remains unchanged. We find that the regression coefficients of *ATP* are 0.025, 0.019, and 0.016, respectively, and they are all significant at the 1% level, which further strengthens the robustness of the main regression results.

Similarly, we use alternative anti-takeover intensity indexes to ensure the robustness of the conclusion. Cremers and Nair (2005) construct an API index by using three provisions: staggered board, poison pill and the increase of either the threshold or the duration of shareholdings qualified to propose an interim shareholders' meeting. The E-index constructed by Bebchuk et al. (2009) mainly considers five provisions: staggered board, poison pill, supermajority requirement, limit to the amendment of Corporate Charter, and golden parachute. Following the API index, we construct *ATP2* by considering the staggered board, and the increase of either the threshold or the duration of shareholdings qualified to propose an interim shareholders' meeting, and then, following the E-index, we construct *ATP3* with staggered board, supermajority requirement, and golden parachute. Meanwhile, we also establish *ATP6* index which includes the six most frequently used provisions: supermajority requirement, cumulative voting rights, restrictions on board nomination rights in terms of the threshold and duration of shareholdings, checking on board qualification, and staggered board by considering the using frequency of individual provision in China market. We replace *ATP* in model (1) with all these three alternative measures and repeat the main regression. The regression results are shown in Panel B of Table 7. We can see that the coefficients of *ATP2*, *ATP3*, and *ATP6* are 0.083, 0.076, and 0.015, respectively, and all coefficients of interest maintain the same significance and signs as in Table 4.

#### 4.3.3. Other robustness tests

Furthermore, in order to improve the robustness of the research results, we also conduct the following robustness tests. (1) Executive power has a joint effect on the adoption of anti-takeover provisions and excess compensation, which may lead to a positive impact of anti-takeover provisions on excess compensation as shown in our study; therefore, our main conclusion may be the results of pseudo-regression. Learning from J. P. H. Fan et al. (2007), we divide the samples into groups according to the level of executive power (*PowerIndex*), and compare the coefficient of *ATP* in both sub-samples. The reason is that if there is a joint effect of executive power on the adoption of anti-takeover provisions and excess compensation, we expect to see that the impact of the anti-takeover provision on the excess compensation will be more notable in the group with high executive power.

However, the regression results show that the impact of the anti-takeover provision on excess compensation is significantly positive in both groups, which alleviates our concern about the joint impact of executive power to a certain extent. (2) Considering that the sample size of some industries is too small and the majority of the firms in our sample is in manufacturing industry, we delete industries with fewer than 30 observations and also limit the samples to listed manufacturing firms. The regression results show that there is no obvious change in the research conclusions.

## 5. Additional analyses

### 5.1. *The impact of specific provision*

Different provisions may resist hostile takeover through different paths, thus the ways they act on excess compensation may vary as well. Specifically, staggering the board stipulates all directors cannot be replaced in the same year, increasing the difficulty of the control right change after the takeover. In this way, it eases the discipline of the takeover market on the executives, and finally affords the opportunity of the executives' self-interest. The restrictions on board nomination rights in terms of the threshold and duration of shareholdings require that the shareholders who nominate directors or supervisor candidates should have a minimum and continuous shareholding. Checking on board qualification entitles the board to refuse to submit candidates and proposals that do not meet the requirements to the shareholders meeting for discussion, or to determine the final candidates' qualifications of directors. These three provisions directly reduce the possibility of the acquirer gaining seats on the board, thereby reducing the threat from the external control market to executives, and finally raising the executive entrenchment opportunity. The special obligation to decrease the threshold of changes in shareholdings qualified for an announcement adds a shareholder information disclosure cost, which may reduce the enthusiasm of the acquirer, thereby relieving the pressure of the takeover market and finally exacerbating the self-interest of the executives. The provision to increase either the threshold or the duration of shareholdings qualified to propose an interim shareholders' meeting limits the right of hostile acquirers to call an interim shareholders' meeting to gain board seats, and effectively delays the change of control rights, which weakens the threat of the external control market and aggravates executive entrenchment. Cumulative voting allows that each share held by the shareholders shall have the voting rights equal to the total number of directors or supervisors elected, and shareholders could collectively use the voting rights when electing directors or supervisors at the general meeting of shareholders. This kind of voting enlarges the required voting rights held by the acquirer to gain board seats, which may increase the difficulty of the acquirer to control the board, thereby reducing their takeover motivation and offering the opportunities for executive self-interest. The supermajority requirement requires a firm's special issues to be passed only if agreed by more than a threshold percentage of the voting rights and their proxies. This increases the difficulty for the acquirer to change corporate decisions and gain control rights, thereby decreasing the pressure faced by a target from a hostile takeover, and affects executive entrenchment. Finally, the golden parachute increases the cost of a hostile takeover through offering high compensation to

executives after the hostile acquisition, so as to reduce the pressure on executives from the takeover market, and further aggravating executive entrenchment.

In theory, the provisions – such as special obligations to decrease the threshold of changes in shareholdings qualified for an announcement, increasing either the threshold or the duration of shareholdings qualified to propose an interim shareholders' meeting, restrictions on board nomination rights in terms of the threshold and duration of shareholdings, checking on board qualification, and staggered board – delay the transfer of control rights, and are the most effective provisions to defend against a hostile takeover. Therefore, they should have the greatest impact on excess compensation. The provisions such as supermajority requirement and cumulative voting rights are not initially adopted for anti-takeover, thus they may have a weaker effect. Accordingly, their effect on executive self-interest should be limited. In addition, the golden parachute provision directly protects the executives' interests, which is likely to become a tool for executives to expropriate wealth from shareholders (Ye & Wu, 2017). Consequently, its effect on resisting the takeover market is weaker, and so is its impact on the excess compensation.

To test above arguments, we first study the nine provisions separately, by defining nine dummy variables – golden parachute (*GP*), special obligation to decrease the threshold of changes in shareholdings qualified for an announcement (*SROS*), cumulative voting rights (*CV*), supermajority requirement provision (*AM*), restriction on board nomination rights in terms of the duration of shareholdings (*DNTL*), restriction on board nomination rights in terms of the threshold of shareholdings (*DNSL*), checking on board qualification (*BQE*), staggered board (*SB*), and provision to increase the duration of shareholdings qualified to propose an interim shareholders' meeting (*CSM*) – and then replacing *ATP* in model (1) with them separately. The results are shown in Panel A of Table 8, which shows that *SROS*, *DNTL*, *BQE*, and *SB* dramatically increase the excess compensation, with coefficients of 0.101, 0.042, 0.059, and 0.090, respectively, and all of them are statistically significant. Unfortunately, *DNSL* and *CSM* do not show a significant positive impact. Meanwhile as expected, *CV*, *AM*,<sup>5</sup> and *GP* do not have a significant impact on the executive excess compensation.

Second, based on the above analysis, drawing on Gompers et al. (2003), we examine the impact of different types of provisions on excess compensation, and define the combination of special obligation to decrease the threshold of changes in shareholdings qualified for an announcement, the provision to increase either the threshold or the duration of shareholdings qualified to propose an interim shareholders' meeting, the restrictions on board nomination rights in terms of the duration and threshold of shareholdings, checking on board qualification, and staggered board, as delay provisions (*Delay*), the combination of Supermajority requirement and cumulative voting rights as voting provisions (*Voting*), and the golden parachute as protection provisions (*Protection*). Then we replace *ATP*<sup>6</sup> with the above three variables to estimate model (1). The specific results are shown in Panel B of Table 8. It shows that only delay anti-takeover provisions have a significant positive effect on executive excess compensation at the level of 5%, the coefficients of *Voting* and *Protection* appear to be not significant. Overall, as expected,

<sup>5</sup>Since supermajority requirements have been adopted by all sample firms, the regression coefficient of *AM* is 0.

<sup>6</sup>Considering that the *delay* class includes six provisions, the *voting* class comprises two provisions and there is just one provision in the *protection* class, we standardise these three classes of provisions in order to eliminate the estimation bias caused by distribution differences of them.

**Table 8.** Test on the impact of different provision.

Panel A Test based on the separate anti-takeover provision								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>Overpay</i>	<i>Overpay</i>	<i>Overpay</i>	<i>Overpay</i>	<i>Overpay</i>	<i>Overpay</i>	<i>Overpay</i>	<i>Overpay</i>
<i>GP</i>	0.074 (1.33)							
<i>SROS</i>		0.101* (1.88)						
<i>CV</i>			0.037 (0.78)					
<i>DNTL</i>				0.042** (2.30)				
<i>DNSL</i>					-0.012 (-0.82)			
<i>BQE</i>						0.059*** (4.97)		
<i>SB</i>							0.090*** (4.19)	
<i>CSM</i>								0.043 (0.55)
<i>Size</i>	0.106*** (15.30)	0.106*** (15.27)	0.106*** (15.32)	0.106*** (15.23)	0.024** (2.48)	0.107*** (15.38)	0.105*** (15.10)	0.106*** (15.30)
<i>Growth</i>	-0.079*** (-4.38)	-0.080*** (-4.43)	-0.080*** (-4.41)	-0.078*** (-4.32)	-0.054*** (-4.74)	-0.080*** (-4.43)	-0.078*** (-4.31)	-0.080*** (-4.41)
<i>ROA</i>	-0.366*** (-3.72)	-0.361*** (-3.66)	-0.365*** (-3.71)	-0.367*** (-3.73)	-1.260*** (-17.54)	-0.370*** (-3.76)	-0.364*** (-3.70)	-0.365*** (-3.71)
<i>Lev</i>	-0.291*** (-9.52)	-0.291*** (-9.50)	-0.291*** (-9.51)	-0.289*** (-9.44)	-0.182*** (-5.86)	-0.288*** (-9.43)	-0.290*** (-9.49)	-0.291*** (-9.50)
<i>MB</i>	-0.570*** (-17.22)	-0.568*** (-17.18)	-0.569*** (-17.21)	-0.567*** (-17.15)	-0.292*** (-10.40)	-0.571*** (-17.27)	-0.565*** (-17.07)	-0.569*** (-17.21)
<i>Soe</i>	-0.010 (-0.86)	-0.010 (-0.82)	-0.010 (-0.82)	-0.009 (-0.78)	-0.023 (-0.85)	-0.009 (-0.73)	-0.010 (-0.82)	-0.010 (-0.82)
<i>Top1</i>	-0.241*** (-6.90)	-0.241*** (-6.90)	-0.244*** (-6.96)	-0.239*** (-6.82)	-0.033 (-0.60)	-0.242*** (-6.94)	-0.228*** (-6.51)	-0.242*** (-6.92)
<i>Stockreturn</i>	-0.045*** (-3.64)	-0.044*** (-3.63)	-0.045*** (-3.63)	-0.045*** (-3.67)	-0.028*** (-4.10)	-0.045*** (-3.65)	-0.045*** (-3.68)	-0.045*** (-3.64)
<i>Volatility</i>	-0.168 (-1.55)	-0.165 (-1.53)	-0.169 (-1.56)	-0.164 (-1.52)	0.040 (0.61)	-0.171 (-1.58)	-0.159 (-1.47)	-0.169 (-1.56)
<i>_cons</i>	-1.656*** (-11.81)	-1.654*** (-11.79)	-1.694*** (-11.44)	-1.652*** (-11.78)	-0.164 (-0.72)	-1.677*** (-11.97)	-1.643*** (-11.72)	-1.657*** (-11.82)
<i>Area</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Ind</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Year</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	12266	12266	12266	12266	12266	12266	12266	12266
<i>r2_a</i>	0.038	0.039	0.038	0.039	-0.169	0.040	0.040	0.038
<i>F</i>	15.01	15.06	14.98	15.11	21.94	15.69	15.48	14.97
Panel B Test based on different anti-takeover provisions type								
		(1) <i>Overpay</i>		(2) <i>Overpay</i>		(3) <i>Overpay</i>		
<i>Voting</i>		0.037 (0.78)						
<i>Protection</i>				0.074 (1.33)				
<i>Delay</i>						0.016** (2.47)		
<i>ROA</i>			0.106*** (15.32)		0.106*** (15.30)		0.105*** (15.20)	
<i>Size</i>			-0.080*** (-4.41)		-0.079*** (-4.38)		-0.078*** (-4.34)	
<i>Growth</i>			-0.365*** (-3.71)		-0.366*** (-3.72)		-0.365*** (-3.71)	
<i>Lev</i>			-0.291*** (-9.51)		-0.291*** (-9.52)		-0.291*** (-9.51)	
<i>MB</i>			-0.569*** (-17.21)		-0.570*** (-17.22)		-0.567*** (-17.12)	

(Continued)

**Table 8.** (Continued).

Panel A Test based on the separate anti-takeover provision								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>Overpay</i>	<i>Overpay</i>	<i>Overpay</i>	<i>Overpay</i>	<i>Overpay</i>	<i>Overpay</i>	<i>Overpay</i>	<i>Overpay</i>
<i>Soe</i>			-0.010 (-0.82)		-0.010 (-0.86)			-0.011 (-0.91)
<i>Top1</i>			-0.244*** (-6.96)		-0.241*** (-6.90)			-0.236*** (-6.74)
<i>Stockreturn</i>			-0.045*** (-3.63)		-0.045*** (-3.64)			-0.045*** (-3.68)
<i>Volatility</i>			-0.169 (-1.56)		-0.168 (-1.55)			-0.163 (-1.50)
<i>_cons</i>			-1.731*** (-10.22)		-1.656*** (-11.81)			-1.656*** (-11.81)
<i>Area</i>			Yes		Yes			Yes
<i>Ind</i>			Yes		Yes			Yes
<i>Year</i>			Yes		Yes			Yes
<i>N</i>			12266		12266			12266
<i>r2_a</i>			0.038		0.038			0.039
<i>F</i>			14.98		15.01			15.14

with the enhancement of the intensity of the delay provisions, the firm is less likely to be acquired, which stabilises the position of the executive and exacerbates executive entrenchment, thereby helping the executive to obtain excess compensation.

## 5.2. Cross-sectional tests

The above research results indicate that, in the current environment in China, the executive entrenchment effect of the anti-takeover provisions exceeds the long-term benefit effect, showing a net increase in excess compensation. We further do the cross-sectional test to investigate the mechanism of the anti-takeover provisions, playing on the excess compensation in this section. That is to say, we try to differentiate under what circumstances the effect of the anti-takeover provisions on executive excess compensation would be more prominent. Specifically, the ownership concentration and the nature of property rights affect the market pressure of the takeover market on executive discipline. The executive power affects the ability and opportunities of executive self-interest. The independence of the board impacts the supervision of executive entrenchment, and managerial myopia affects the motivation of executive entrenchment. Thus, our analyses are based on these five circumstances.

(1) *The impact of ownership concentration.* In general, firms with more dispersed ownership are more threatened by a hostile takeover, so that the adoption of anti-takeover provisions in the Corporate Charter is more likely to promote executive self-interest, and then affect excess compensation. Therefore, the positive effect of anti-takeover provisions on excess compensation should be more significant in firms with dispersed ownership. In consideration that the largest shareholder has absolute control of the firm, the higher the shareholding of the largest shareholder, the more difficult for an acquirer to gain control. We use the largest shareholder's shareholding ratio (*Top1*) to proxy for ownership concentration, and interact it with *ATP* to generate the interaction term *Top1\_ATP*, then add the interaction term into model (1) to repeat the main regression. If the coefficient of the interaction term is significantly negative, our inference is supported. However, the



regression result in column (1) of Table 9 shows that the coefficient of the interaction term is 0.079 and significant at the 10% level, which contradicts our expectation. We argue that the concentrated ownership itself possibly constructs a natural barrier for a hostile takeover, which outweighs the effect of the takeover market. Thus, in firms with higher ownership concentration, the impact of the control market is smaller, and the effect of provisions on excess compensation may be weaker. In firms with relatively dispersed ownership, the influence of the control market should be more notable, which means the moderate effect of ownership concentration on the relationship of anti-takeover provisions and excess compensation may be non-linear. In order to test this speculation, we divide our sample into two subsamples according to the median of the largest shareholder's shareholding, one of which is the subsample with high ownership concentration ( $d\_Top1 = 1$ ) and the other is the subsample with low ownership concentration ( $d\_Top1 = 0$ ). Then we repeat the previous regression separately using both subsamples. The regression results are shown in columns (2) and (3) of Table 9. We find that in the group with lower ownership concentration, the coefficient of the interaction term is  $-0.321$ , which is significantly negative at the level of 5%. In the group with higher ownership concentration, the coefficient is not significant. This suggests that in the case of low ownership concentration, the impact of anti-takeover provisions on excess compensation increases with the intensifying threat from the control market, thus verifying the effect of external control market pressure on excess compensation.

**Table 9.** The impact of ownership concentration.

	(1) <i>Overpay</i>	(2) <i>Overpay</i> $d\_Top1 = 1$	(3) <i>Overpay</i> $d\_Top1 = 0$
<i>ATP</i>	-0.009 (-0.63)	-0.010 (-0.25)	0.068** (2.35)
<i>Top1_ATP</i>	0.079* (1.96)	0.097 (1.16)	-0.321** (-2.47)
<i>Size</i>	0.106*** (15.24)	0.095*** (9.96)	0.122*** (11.82)
<i>Growth</i>	-0.079*** (-4.37)	-0.053* (-1.92)	-0.107*** (-4.44)
<i>ROA</i>	-0.370*** (-3.76)	-0.435*** (-3.07)	-0.313** (-2.29)
<i>Lev</i>	-0.292*** (-9.54)	-0.297*** (-6.55)	-0.295*** (-7.09)
<i>MB</i>	-0.566*** (-17.11)	-0.588*** (-12.94)	-0.568*** (-11.74)
<i>Soe</i>	-0.011 (-0.93)	-0.029* (-1.71)	0.030* (1.71)
<i>Top1</i>	-0.444*** (-3.97)	-0.292 (-1.28)	0.157 (0.44)
<i>Stockreturn</i>	-0.045*** (-3.67)	-0.072*** (-4.11)	-0.021 (-1.23)
<i>Volatility</i>	-0.159 (-1.47)	-0.061 (-0.40)	-0.241 (-1.57)
<i>_cons</i>	-1.629*** (-11.33)	-1.308*** (-6.15)	-2.288*** (-10.10)
<i>Area</i>	Yes	Yes	Yes
<i>Ind</i>	Yes	Yes	Yes
<i>Year</i>	Yes	Yes	Yes
<i>N</i>	12266	6130	6136
<i>r2_a</i>	0.039	0.044	0.049
<i>F</i>	14.86	8.89	9.85

(2) *The impact of property rights.* Under the unique background of China, the role of the takeover market played in designing excess compensation varies with the nature of property rights. Compared with non-state-owned enterprises, the ownership of state-owned enterprises is more protected by the government, and the change of control rights is subject to government intervention. Therefore, they are less pressured by the external control market. Correspondingly, the impact of anti-takeover provisions on excess compensation in state-owned enterprises would also be smaller. On the contrary, the ownership of private firms is more susceptible to the external control market, thus, in these enterprises, anti-takeover provisions weaken the external governance of the control market and exacerbate executive self-interest; correspondingly, the impact of anti-takeover provisions on excess compensation should be more notable in these firms. Moreover, the compensation system in China is different under different property rights. In particular, the 'Salary Limit Order' introduced in 2009 affects the compensation of executives in central government state-owned enterprises, while the executives' compensation of private enterprises is more market-oriented. It further leads to a more significant influence of anti-takeover provisions on excess compensation in non-state-owned enterprises. In order to test this argument, we introduce *Soe\_ATP*, which is the interaction term of property rights (*SOE*) and *ATP*, into model (1). The regression result is shown in column (1) of Table 10. Consistent with our expectation, the regression result demonstrates that the impact of anti-takeover provisions on excess compensation is more notable in non-state-owned enterprises. The coefficient of the interaction term (*Soe\_ATP*) is  $-0.022$ , which is significantly negative at the level of 10%.

(3) *The impact of executive power.* Executive power generally refers to a significant influence beyond the scope of executives' specific control when the internal corporate governance has defects and the external corporate governance lacks discipline (Quan et al., 2010). When the interests of executive and shareholders are in conflict, executives are more likely to be entrenched and extract more private benefits by using their power. Under the current background in China, the 'insider control' of executives and the 'cronyism' of the board cause more weaknesses in the internal governance structure (Zheng et al., 2012), which leaves more space for executives' entrenchment. In firms with more executive power, the board will be more 'captured' by executives, making it more difficult for them to perform its supervisory role (Lu & Li, 2014). This improves executives' decision-making power on their own remuneration, and ultimately makes them obtain excess compensation. In this sense, the entrenchment effect of the anti-takeover provisions should be more prominent in firms with stronger executive power. We further add the interaction term of executive power (*PowerIndex*) and *ATP* to model (1). The regression result is shown in column (2) of Table 10, which indicates that the increase in executive power further strengthens the executive excess compensation entrenchment effect of the anti-takeover provisions. The coefficient of the interaction term is 0.054 and is significant at the level of 10%.

(4) *The impact of board supervision.* The baseline regression shows that the anti-takeover provisions have an entrenchment effect on excess compensation, which will harm firm value. However, this opportunistic behaviour will be supervised by those charged with governance. Therefore, as the most important supervisors of the firm, the improvement in the supervision of the board will mitigate the negative impact. In order to verify our inference, we use the independent director ratio (*INDR*) as the proxy variable for board

**Table 10.** The impact of property rights, executive power, board independence and managerial myopia.

	(1) <i>Overpay</i>	(2) <i>Overpay</i>	(3) <i>Overpay</i>	(4) <i>Overpay</i>
<i>ATP</i>	0.029*** (3.86)	-0.012 (-0.64)	0.090** (2.08)	0.059*** (6.62)
<i>Soe_ATP</i>	-0.022* (-1.79)			
<i>PowerIndex</i>		0.091 (1.05)		
<i>PowerIndex_ATP</i>		0.054* (1.66)		
<i>INDR</i>			0.436 (1.39)	
<i>INDR_ATP</i>			-0.196* (-1.70)	
<i>R&amp;Drate</i>				5.014*** (7.17)
<i>R&amp;Drate_ATP</i>				-1.613*** (-6.90)
<i>Size</i>	0.118*** (15.83)	0.095*** (13.60)	0.102*** (14.50)	0.098*** (12.92)
<i>Growth</i>	-0.131*** (-7.30)	-0.082*** (-4.57)	-0.102*** (-5.68)	-0.098*** (-5.11)
<i>ROA</i>	-0.401*** (-3.98)	-0.391*** (-3.99)	-0.297*** (-3.01)	-0.489*** (-4.48)
<i>Lev</i>	-0.221*** (-7.16)	-0.274*** (-8.96)	-0.266*** (-8.65)	-0.353*** (-10.30)
<i>MB</i>	-0.567*** (-15.01)	-0.534*** (-16.08)	-0.489*** (-14.32)	-0.610*** (-17.10)
<i>Soe</i>	0.093*** (2.65)	-0.010 (-0.84)	0.005 (0.39)	-0.007 (-0.48)
<i>Top1</i>	-0.260*** (-7.41)	-0.254*** (-7.24)	-0.200*** (-5.72)	-0.233*** (-6.08)
<i>Stockreturn</i>	-0.035*** (-2.95)	-0.043*** (-3.49)	-0.038*** (-3.17)	-0.046*** (-3.50)
<i>Volatility</i>	-0.285*** (-2.63)	-0.131 (-1.22)	-0.201* (-1.86)	-0.215* (-1.84)
<i>_cons</i>	-2.178*** (-13.47)	-1.543*** (-10.41)	-1.850*** (-10.11)	-1.412*** (-9.00)
<i>Area</i>	Yes	Yes	Yes	Yes
<i>Ind</i>	Yes	Yes	Yes	Yes
<i>Year</i>	Yes	Yes	Yes	Yes
<i>N</i>	12266	12266	12266	12266
<i>r2_a</i>	0.077	0.045	0.066	0.057
<i>F</i>	11.44	16.56	13.89	17.43

supervision, and interact it with *ATP* to generate the interaction term (*INDR\_ATP*), and then add *INDR* and *INDR\_ATP* into the model (1) for regression. The regression result is shown in column (3) of Table 10. From the result, we find that with the increase in the proportion of independent directors, the positive impact of the anti-takeover provisions on the executive excess compensation is weakened. The coefficient of the interaction term (*INDR\_ATP*) is -0.196, which is significant at the 10% level.

(5) *The impact of managerial myopia.* A firm with more managerial myopia has less alignment between executives and shareholders, which leads to higher agency costs and a more marked effect of anti-takeover provisions on executive excess compensation. Since R&D expense is an investment that takes a long time to realise its value and it is highly uncertain, myopic managers will reduce R&D investment. Following Bushee (1998), we use R&D investment intensity (*R&Drate*, R&D investment/total assets in the beginning

**Table 11.** The impact of ATP and excess compensation on firm value.

	(1)	(2)
	<i>d_tobinq</i>	<i>d_tobinq</i>
<i>UP</i>	-0.144* (-1.66)	-0.139 (-1.58)
<i>d_Overpay</i>		0.124 (1.38)
<i>UP_d_Overpay</i>		-0.550** (-1.99)
<i>d_Size</i>	-1.746*** (-16.91)	-1.792*** (-17.06)
<i>d_Growth</i>	0.161** (2.12)	0.184** (2.38)
<i>d_ROA</i>	0.023 (0.05)	-0.126 (-0.24)
<i>d_Lev</i>	-0.813*** (-2.88)	0.440 (1.53)
<i>d_Top1</i>	-2.629*** (-4.60)	-2.656*** (-4.58)
<i>d_INDR</i>	0.223 (0.34)	0.136 (0.20)
<i>d_Duality</i>	-0.031 (-0.36)	-0.030 (-0.34)
<i>d_Stockreturn</i>	1.046*** (34.82)	1.041*** (34.14)
<i>_cons</i>	0.258 (1.45)	0.257 (1.42)
<i>Area</i>	Yes	Yes
<i>Ind</i>	Yes	Yes
<i>Year</i>	Yes	Yes
<i>N</i>	9037	9037
<i>r2_a</i>	0.164	0.163
<i>F</i>	64.21	32.32

period) as a measure of managerial myopia, and add it and its interaction term with *ATP* (*R&Drate\_ATP*) to model (1). Column (4) of Table 10 reports the regression result, which shows that the increase in R&D intensity significantly reduces the entrenchment effect of anti-takeover provisions on executive excess compensation as expected. The coefficient of interaction term is -1.613 and is significant at the 1% level.

### 5.3. The effect of anti-takeover provision on firm value

As mentioned above, the adoption of anti-takeover provisions increases the excess compensation of executive in China, which may reduce the firm value. At the same time, we predict that the entrenchment effect will be more notable in firms with both increased anti-takeover provisions and increased excess compensation. In order to test this argument, we conduct the following tests. First, we examine the impact of the rising intensity of anti-takeover provisions on the change of firm value. Second, we examine the combined impact of the rising intensity of anti-takeover provisions and the increasing excess compensation on the change of firm value. Specifically, we establish an OLS model to examine the impact of a provision's increase (*UP*) on the change of Tobin's Q (*d\_tobinq*), and add the interaction-term of *UP* and excess compensation's increase (*d\_Overpay*, dummy variable, takes 1 if a firm has an Overpay increase, 0 otherwise) to further explore the influence of their interaction on Tobin's Q change.

The results are reported in Table 11, where column (1) shows the impact of *UP* on *d\_tobinq*, and column (2) shows the impact of the interaction term (*UP\_d\_Overpay*) on *d\_tobinq*. We find that the increase of anti-takeover provisions reduces the firm value, and the coefficient of *UP* is  $-0.144$ , which is significant at the level of 10%. The augmenting of excess compensation further aggravates the negative impact of anti-takeover provisions on the firm value, and the coefficient of *UP\_d\_Overpay* is  $-0.550$ , which is significant at the 5% level.

## 6. Conclusion

In this article, we use the sample of A-share listed firms in China from 2009 to 2017, by hand-collecting anti-takeover provisions data from the Corporate Charter, to study the influence of anti-takeover provisions on executive excess compensation. We find that there is a positive association between the intensity of anti-takeover provisions and the executive excess compensation, indicating that the entrenchment effect of the anti-takeover provisions on the executive compensation outweighs the long-term benefit effect in the current environment of China. Further research results show that: (1) among the anti-takeover provisions, special obligation to decrease the threshold of changes in shareholdings qualified for an announcement, checking on board qualifications, restrictions on board nomination rights in terms of the duration of shareholdings and staggered boards, remarkably increase excess compensation. After categorising the anti-takeover provisions into delay, voting and protection classes, the delay provisions resist the pressure of control market better, and have a more significantly positive impact on executive excess compensation. (2) In firms with higher executive power, a less independent board, and higher managerial myopia, the anti-takeover provisions have a more serious entrenchment effect on the executive excess compensation. (3) State-owned enterprises are more affected by the 'Salary Limit Order', and the state-owned ownership is more protected by the government, so the impact of anti-takeover provisions on excess compensation is less significant in state-owned firms. (4) Ownership structure has a non-linear moderate effect on the relationship between anti-takeover provisions and excess compensation. In firms with lower shareholding by the largest shareholders, the anti-takeover provisions dramatically increase executive excess compensation with the decrease of control. In the firms with higher shareholding by the largest shareholder, the effect of ownership concentration on the relationship between anti-takeover provisions and executive excess compensation is not significant. (5) The adoption of anti-takeover provisions reduces the firm value. When increased anti-takeover provisions are combined with increased excess compensation, firm value is further reduced.

There are several implications in this article. First, although the adoption of anti-takeover provisions in the Corporate Charter can protect the target firm from the threat of hostile takeover, it does not mean the more anti-takeover provisions the better. This is because under the current background in China, anti-takeover provisions behave more as an instrument of executive entrenchment than a high quality corporate governance mechanism. When adopting anti-takeover provisions, the firms need to trade off the cost and benefit based on the real situation of the market and firm, so that the provisions can have a true effect on the protection of shareholders. In addition, the government should take more measures to regulate the Corporate Charter autonomy, and rationally

guide the firms to adopt charter provisions in a positive manner. Second, executive compensation is more likely to be a tool used for seeking private interests than for motivating the hard effort of executives in many cases under recent Chinese background, thus the incentive effect of the compensation contract needs further confirmation. In order to prevent the executives from using their power to pursue personal benefits, firms should design executive compensation contracts more effectively so as to reach better alignment of the interests of executives and shareholders. Finally, the control market has gradually shown its external corporate governance effect on the disciplining of executive behaviour in current China. In this sense, it is important to steadily advance the development of the external control market, which is conducive to restraining the opportunistic behaviour of executives and maximising the value of firms.

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### References

- Atanassov, J. (2013). Do hostile takeovers stifle innovation? Evidence from antitakeover legislation and corporate patenting. *Journal of Finance*, 68(3), 1097~1131. <https://doi.org/10.1111/jofi.12019>
- Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance? *The Journal of Finance*, 22(2), 783~827. <https://doi.org/10.2139/ssrn.593423>
- Bebchuk, L.A., & Fried, J.M. (2003). Executive compensation as an agency problem. *Journal of Economic Perspectives*, 17(3), 71~92. <https://doi.org/10.1257/089533003769204362>
- Bhojraj, S., Sengupta, P., & Zhang, S. (2017). Takeover defenses: Entrenchment and efficiency. *Journal of Accounting and Economics*, 63(1), 142~160. <https://doi.org/10.1016/j.jacceco.2016.12.001>
- Borokhovich, K.A., Brunarski, K.R., & Parrino, R. (1997). CEO contracting and antitakeover amendments. *The Journal of Finance*, 52(4), 1495~1517. <https://doi.org/10.1111/j.1540-6261.1997.tb01118.x>
- Brick, I.E., Palmon, O., & Wald, J.K. (2006). CEO compensation, director compensation, and firm performance: Evidence of cronyism? *Journal of Corporate Finance*, 12(3), 403~423. <https://doi.org/10.1016/j.jcorpfin.2005.08.005>
- Bushee, B.J. (1998). The influence of institutional investors on myopic R&D investment behavior. *Accounting Review*, 73(3), 305~333. <https://www.jstor.org/stable/248542>
- Cai, G.L., Liu, J.H., & Ma, X.X. (2018). Governance of non-state-owned shareholders and incentive of soe executives' compensation. *Executive World*, 34(5), 137~149. <https://doi.org/10.19744/j.cnki.11-1235/f.2018.05.011>
- Cain, M.D., Mckeon, S.B., & Solomon, S.D. (2017). Do takeover laws matter? Evidence from five decades of hostile takeovers. *Journal of Financial Economics*, 124(3), 464~485. <https://doi.org/10.1016/j.jfineco.2017.04.003>
- Cen, L., Dasgupta, S., & Sen, R. (2016). Discipline or disruption? Stakeholder relationships and the effect of takeover threat. *Executive Science*, 62(10), 2820~2841. <https://doi.org/10.1287/mnsc.2015.2252>

- Chemmanur, T.J., Paeglis, I., & Simonyan, K. (2011). Executive quality and antitakeover provisions. *Journal of Law and Economics*, 54(3), 651~692. <https://doi.org/10.1086/655805>
- Chen, X.S., & Liu, H.D. (2019). Institutional investors' holdings, executives' excess compensation and corporate governance. *Journal of Guangdong University of Business Studies*, 34(2), 46~59. CNKI: SUN:SONG.0.2019-02-004
- Chen, Y.G., & Shi, F. (2014). Antitakeover provisions, takeover probability and firm value. *Accounting Research*, 2, 34~40+94. <https://doi.org/110.3969/j.issn.1003-2886.2014.02.006>
- Chen, Y.G., Yang, Y.J., & Liu, Y. (2018). Dose staggered board election increase agency cost? *Securities Market Herald*, 4, 35~41. CNKI:SUN:ZQDB.0.2018-04-006
- Cheng, X.S., Liu, J.M., & Chen, J.H. (2015). Talent signaling or compensation justification: Excess executive compensation and information disclosure on strategy. *Journal of Financial Research*, 12, 150~165. CNKI:SUN:JRYJ.0.2015-12-010
- Cohen, A., & Wang, C.C.Y. (2013). How do staggered boards affect shareholder value? Evidence from a natural experiment. *Journal of Financial Economics*, 110(3), 627~641. <https://doi.org/10.1016/j.jfineco.2013.08.005>
- Core, J.E., Guay, W., & Larcker, D.F. (2008). The power of the pen and executive compensations. *Journal of Financial Economics*, 88(1), 1~25. <https://doi.org/10.1016/j.jfineco.2007.05.001>
- Core, J.E., Holthausen, R.W., & Larcker, D.F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics*, 51(2), 141~152. [https://doi.org/10.1016/S0304-405X\(98\)00058-0](https://doi.org/10.1016/S0304-405X(98)00058-0)
- Cremers, K.J.M., & Nair, V.B. (2005). Governance mechanisms and equity prices. *Journal of Finance*, 60(6), 2859~2894. <https://doi.org/10.1111/j.1540-6261.2005.00819.x>
- Dai, B., Liu, X., & Hao, Y. (2011). Executive power, compensation contract and SOEs reform—Evidence from listed SOEs in China. *Modern Economic Science*, 4, 90~98+127. CNKI:SUN: DJKX.0.2011-04-014
- DiMaggio, P.J., & Powell, W.W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147~160. <https://doi.org/10.2307/2095101>
- Ertugrul, & Mine. (2015). Bargaining power of targets: Takeover defenses and top-tier target advisors. *Journal of Economics and Business*, 78, 48~78. <https://doi.org/10.1016/j.jeconbus.2014.12.001>
- Fan, J.P.H., Wong, T.J., & Zhang, T. (2007). Politically connected CEOs, corporate governance, and post-IPO performance of China's newly partially privatized firms. *Journal of Financial Economics*, 84(2), 330~357. <https://doi.org/10.1016/j.jfineco.2006.03.008>
- Fang, J.X. (2012). Executive excess compensation and corporate governance decisions. *Executive World*, 11, 144~155. <https://doi.org/10.19744/j.cnki.11-1235/f.2012.11.013>
- Faulkender, M., & Yang, J. (2010). Inside the black box: The role and composition of compensation peer groups. *Journal of Financial Economics*, 96(2), 257~270. <https://doi.org/10.1016/j.jfineco.2010.01.006>
- Finkelstein, S. (1992). Power in top executive teams: Dimensions, measurement, and validation. *Academy of Executive Journal*, 35, 505~538. <https://doi.org/10.2307/256485>
- Giroud, X., & Mueller, H.M. (2011). Corporate governance, product market competition, and equity prices. *The Journal of Finance*, 66(2), 563~600. <https://doi.org/10.1111/j.1540-6261.2010.01642.x>
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics*, 118(1), 107~155. <https://doi.org/10.1162/00335530360535162>
- Gormley, T.A., & Matsa, D.A. (2016). Playing it safe? Managerial preferences, risk, and agency conflicts. *Journal of Financial Economics*, 122(3), 431~455. <https://doi.org/10.1016/j.jfineco.2016.08.002>
- Huang, S.Q., Wu, L.H., & Xu, C.B. (2017). Has executive excess compensation affected corporate debt financing? *Contemporary Finance & Economics*, 11, 112~124. <https://doi.org/10.13676/j.cnki.cn36-1030/f.2017.11.011>
- Jensen, M.C., & Ruback, R.S. (1983). The market for corporate control. *Journal of Financial Economics*, 11(1), 5~49. [https://doi.org/10.1016/0304-405X\(83\)90004-1](https://doi.org/10.1016/0304-405X(83)90004-1)



- Li, F.F. (2017). An analysis of the acquisition and anti-takeover of listed firms since 2014. *Securities Market Herald*, 12, 30–38. CNKI:SUN:ZQDB.0.2017-12-007
- Li, S.M., Xu, J.H., & Zhang, D. (2016a). Classified board provisions and firm value: From the perspective of firm charter. *Journal of Xiamen University (Arts & Social Sciences)*, 2, 111–121. CNKI:SUN:XMDS.0.2016-02-013
- Li, S.M., Xu, J.H., Zhang, D., & Chen, Y.G. (2016b). Do anti-takeover provisions protect the rights of minority investors?— Evidence from China's a type-share listed firms. *Nankai Business Review*, 4, 49–62. <https://doi.org/10.3969/j.issn.1008-3448.2016.04.006>
- Li, W.A., Qi, L.J., & Li, Y.Z. (2017). Interpretation of “Leveraged Buyout” from the governance enlightenment of “Baowan Dispute”. *Tsinghua Financial Review*, 1, 34–37. <https://doi.org/10.19409/j.cnki.thf-review.2017.01.007>
- Liu, G.L. (2017). Executive excess compensation, Agency cost and Corporate Performance. *Modern Executive Science*, 5, 105–107.
- Lu, R. (2007). Managerial power, compensation gap and performance. *South China Journal of Economics*, 7, 62–72. <https://doi.org/10.3969/j.issn.1000-6249.2007.07.005>
- Lu, Y. (2010). On the impact of activating markets for corporate control on the valuation of listed firms in China. *Journal of Financial Research*, (7), 144–157. <https://doi.org/10.1360/972010-1084>
- Lu, Z.Q., & Li, H.Y. (2014). Manager power, marketing process and manager excessive compensation a comparative analysis of different property right. *Economic Survey*, 3, 108–113. <https://doi.org/10.15931/j.cnki.1006-1096.2014.03.022>
- Luo, H., Huang, M., Zhou, D.W., & Liu, B.H. (2014). Government subsidy, overpay and justifying compensation hypothesis. *Accounting Research*, 1, 42–48+95. CNKI:SUN:KJYJ.0.2014-01-007
- Luo, J.H., Tan, L.H., & Chen, Y. (2018a). Amending antitakeover provisions: Good news or bad news? *Journal of Finance and Economics*, 44(12), 113–125. <https://doi.org/10.16538/j.cnki.jfe.2018.12.009>
- Luo, J.H., Xiang, Y.G., & Lin, X.X. (2018b). Do locally based independent directors fulfill their supervision role? Evidence from the perspective of managerial compensation in state-owned enterprises. *Accounting Research*, 7, 57–63. <https://doi.org/10.3969/j.issn.1003-2886.2018.07.008>
- Luo, K. (2015). Financial dilemma, excess compensation and compensation-performance sensitivity —Based on moderating effects of government subsidy. *Journal of Huazhong Agricultural University (Social Sciences Edition)*, 6, 109–117. <https://doi.org/10.13300/j.cnki.hnwkxb.2015.06.015>
- Morse, A., Nanda, V., & Seru, A. (2011). Are incentive contracts rigged by powerful CEOs? *The Journal of Finance*, 66(5), 1779–1821. <https://doi.org/10.1111/j.1540-6261.2011.01687.x>
- Quan, X.F., & Wu, S.N. (2010). CEO power, information disclosure quality and corporate performance variability: Empirical evidence from the listed firms in SZSE. *Nankai Business Review*, 12, 142–153. <https://doi.org/10.3969/j.issn.1008-3448.2010.04.017>
- Quan, X.F., Wu, S.N., & Wen, F. (2010). Managerial power, private income and compensation rigging. *Economic Research Journal*, 11, 75–89. CNKI:SUN:JJYJ.0.2010-11-009
- Shao, J., Liu, Z.Y., & Yu, X.X. (2013). Corporate governance and anti-takeover provisions: Evidences from A-share listed firms. *China Accounting Review*, 11(4), 369–390. CNKI:SUN:ZKJP.0.2013-04-002
- Shao, J.B., & Fan, C.J. (2019). Does the beauty premium effect exist: Empirical evidence from executive's excess compensation. *Journal of Guangdong University of Finance & Economics*, 34(2), 31–45. CNKI:SUN:SONG.0.2019-02-003
- Wang, Y., Ye, L., & Sheng, M.Q. (2012). Managerial power, opportunism motivation and equity incentive plan design. *Accounting Research*, 10, 35–41+95. <https://doi.org/10.3969/j.issn.1003-2886.2012.10.005>
- Wu, Y.H., & Wu, S.N. (2010). Executive compensation: Incentives or self-interests?— Evidence from listed firms in China. *Accounting Research*, 11, 42–50. <https://doi.org/10.3969/j.issn.1003-2886.2010.11.007>
- Xu, G.Y., Cao, J.Y., Tao, Y., & Li, J.X. (2018). Executive-employee compensation gap, asset retrenchment and organizational turnaround. *Accounting Research*, 10, 58–65. CNKI:SUN:KJYJ.0.2018-10-008

- Xu, J.H., Li, S.M., Zhang, D., & Chen, Y.G. (2018). Anti-takeover provisions and investor protection: Theoretical model and empirical research. *Executive Review*, 30(7), 193–208. <https://doi.org/10.14120/j.cnki.cn11-5057/f.2018.07.018>
- Xu, M.L., Yuan, T.R., & Xu, R.J. (2018). Staggered boards, institutional environment and investment efficiency. *Economic Executive*, 40(5), 21–36. <https://doi.org/10.19559/j.cnki.12-1387.2018.05.009>
- Xu, Y.D., & Zhang, F. (2018). The efficiency of compensation regulation in SOEs—A framework based on information rent. *Accounting Research*, 5, 44–51. <https://doi.org/10.3969/j.issn.1003-2886.2018.05.006>
- Yang, D.M., & Zhao, C. (2012). Media monitoring, media governance and managers' compensation. *Economic Research Journal*, 6, 116–126. CNKI:SUN:JJYJ.0.2012-06-010
- Ye, L., & Wu, Y. (2017). The standard path of anti-takeover provisions of listed firms. *Securities Law Review*, 22(4), 239–260. ISSN: 978-7-5036-9861-3.
- Zhang, X.Z., & Liu, Z.N. (2019). Pyramid ownership structure, excess compensation and compensation defense. *Research on Financial and Economic Issues*, 4, 85–93. <https://doi.org/10.19654/j.cnki.cjwtyj.2019.04.011>
- Zhao, J.M., Wang, J., & Zhang, X. (2017). A study on the impact of non-executive directors on excess salary—Evidence from privately listed firms in China. *Securities Market Herald*, 10, 20–25. CNKI: SUN:ZQDB.0.2017-10-005
- Zheng, Z.G., Sun, J.J., & Oliver, R. (2012). Cronyism of board culture and excess executive compensation. *Economic Research Journal*, 12, 112–125. CNKI:SUN:JJYJ.0.2012-12-010
- Zheng, Z.G., Xu, R., & Xu, X.J. (2011). The establishment of articles of association, protection of investors' rights by law and corporate governance—Based on the evidence of A-share listed firms in China. *Executive World*, 7, 141–153. <https://doi.org/10.19744/j.cnki.11-1235/f.2011.07.012>